



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,842	10/03/2003	Gordon Bowman	GLH 08-896330	2422
27667 7590 05/12/2008 HAYES SOLOWAY P.C. 3450 E. SUNRISE DRIVE, SUITE 140 TUCSON, AZ 85718				
EXAMINER				
SHIH, HAOSHIAN				
ART UNIT		PAPER NUMBER		
2173				
MAIL DATE		DELIVERY MODE		
05/12/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/678,842

**Applicant(s)**

BOWMAN ET AL.

**Examiner**

HAOSHIAN SHIH

**Art Unit**

2173

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02/07/2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 2, 4-21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

### DETAILED ACTION

1. Claims 1-2, 4-21 and 23 are pending in this application and have been examined in response to application filed on 02/07/2008.
2. The previously applied double patenting rejection is hereby withdrawn in view of applicant's amendment.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 11-12, 15-17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Extending Dreamweaver first edition by macromedia (Dreamweaver) in supplement of Document Object Model level 1 specification (DOM).**
5. Prior art DOM is considered as a part of the Dreamweaver reference useable under 102(b) rejection because Dreamweaver utilizes the "DOM level 1" standard (Dreamweaver, pg.14) and Prior art DOM discloses such standard.

6. As to **INDEPENDENT** claim 11, Dreamweaver discloses a method of extending interactivity of a presentation markup language (pg. 7, par.1, lines 4-6), the method comprising the steps of:

searching for a designated control element (pg.28, par. "traversing nodes" and "getting node data"), having a name which follows a designated naming convention (pg.25, line 1; prefix; pg.28, par.8; node.name; DOM, sect 2.2.1 "Naming Conventions") in a document object model; and

calling a function, having a function name based on the naming convention, associated with the designated control element (pg.28, par. "traversing nodes" and "getting node data"; DOM, sect 2.2.1 "Naming Conventions").

7. As to claim 12, Dreamweaver discloses traversing each node in the document object model (pg.28, par.8); and determining whether an element has a name which follows a designated naming convention (pg.28, par.8; node.name).

8. As to claim 15, Dreamweaver discloses determining which script in a collection of scripts is associated with the designated element; and calling the script (pg.28, par. "traversing nodes" and "getting node data").

9. As to claim 16, Dreamweaver discloses calling a script associated with the designated attribute (pg.28, last par.).

10. As to claim 17, Dreamweaver discloses searching attributes of an element in a document object model; determining whether an element attribute has a name which follows a designated naming convention (pg.19; "getElementByTagName (tagName)". Obtaining attributes from tags, the tags will also act as a prefix for elements, which belong to a certain attribute(s)).

11. As to claim 21, Dreamweaver discloses determining which script in a collection of scripts is associated with the designated attribute; and calling the script (pg.28, last par.).

***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-2 and 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreamweaver and Scalable vector graphics 1.1 specification (SVG).**

As to **INDEPENDENT** claim 1, Dreamweaver discloses a system for extending interactivity of a presentation markup language (pg. 7, par.1, lines 4-6), the system comprising:

a collection of designated elements (pg.7, par.1, lines 2-4; pg.13, par.2, lines 2-3) defined using a markup language (pg.14, "the document object model in Dreamweaver"), each designated element comprising:

a namespace (pg.14, par.3, lines 1-2; pg. 23, par.6, lines 3; pg. 25, par.1, lines 1); and

attributes for describing features of the designated element (pg.27, first table; pg. 208, par.1, lines 1; pg.236, par. 1); and

a collection of associated instructions for performing functions to elements in the document object model (pg.15, first table, method), the instructions associated with the designated elements (pg.15, table of objects and methods; pg.205, par.2, lines 1-3).

Dreamweaver does not specifically disclose the collection of designated elements comprising one or more flow control elements for controlling statement flow of a web application.

In the same field of endeavor, SVG discloses the collection of designated elements comprising one or more flow control elements for controlling statement flow of a web application (sect. 5.8.2, "the 'switch' element").

It would have been obvious to one of ordinary skill in the art, having the teaching of Dreamweaver and SVG before him at the time the invention was made, to modify the web application developer tool taught by Dreamweaver to include dynamic graphic

Art Unit: 2100

support taught by SVG with the motivation being to extend web application capacity by adding interactive dynamic graphic support (sect. 1.1, "about SVG").

13. As to claim 2, Dreamweaver discloses an initialization function for directing the processing one or more designated elements in the document object model(pg.25, "Instantiating a tree control"), having instructions for traversing each node in the document object model (pg.28, par.6), identifying designated elements having names following a predetermined naming convention (pg.25, prefix, lines 1) and calling functions associated with identified designated elements (pg.18, par. "DOM details", pg.28, last par, element nodes are called upon to perform associated functions described in the element nodes).

14. As to claim 4, Dreamweaver discloses a collection of designated attributes applied to one or more of the document object model elements for applying passive behavior to objects in the web application (pg.14, fig.1; pg.328, par.1); and a collection of associated instructions for performing functions associated with the designated attributes (pg.329, par.1).

15. As to claim 5, Dreamweaver discloses a 'selectionGroup' attribute for specifying an 'id' attribute of a <selection> element that this element is associated with (pg.15, table 1, alltags/elements).

Art Unit: 2100

16. As to claim 6, SVG discloses behavior elements for manipulating view behavior with respect to web application (sec.17.6 view module; sec.16.7 Magnification and panning, zoomAndPan).

17. As to claim 7, SVG discloses a switch element for defining a conditional statement, and for comparing one value to other values defined in child <case> elements (sect. 5.8.2 "the switch element", 1<sup>st</sup> par.)

18. As to claim 8, SVG discloses a mousePosition element for defining a container for holding current mouse coordinates (sect. 16.8.3, "the 'cursor' element"; a cursor element that contains location information such as x and y coordinates).

19. As to claim 9, SVG discloses a zoom element for scaling a document by a factor (sect, 16.7, "magnification and panning").

**20. Claims 13, 14, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreamweaver and Cain (US. 6,014,138).**

21. As to claim 13, Dreamweaver does not specifically disclose dynamically generating a function name associated with the designated element; passing an object associated with the designated element as a parameter of the generated function;



retrieving the attributes of the object; and performing a function stored in memory having the generated function name.

In the same field of endeavor, Cain discloses dynamically generating a function name associated with the designated element (col.12, line 12-13);

passing an object associated with the designated element as a parameter of the generated function (fig.4H);

retrieving the attributes of the object (col.12, lines 29-31); and

performing a function stored in memory having the generated function name (fig.4H-I).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Dreamweaver and the teachings of Cain for the benefit of creating a custom graphical operator interface (Cain, col.1, lines 23-25).

22. As to claim 14, Dreamweaver discloses determining if the name of the designated element contains a designated prefix (pg25, par.1); Dreamweaver does not specifically disclose generating a function name comprising of the name of the designated element; assigning an object associated with the designated element as the parameter of the function; and assigning predetermined instructions of the designated element as steps for the function to perform.

Art Unit: 2100

In the same field of endeavor, Cain discloses generating a function name comprising of the name of the designated element (col.12, lines 12-13);

assigning an object associated with the designated element as the parameter of the function (fig.4H); and

assigning predetermined instructions of the designated element as steps for the function to perform (fig.4H-I).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Dreamweaver and the teachings of Cain for the benefit of creating a custom graphical operator interface (Cain, col.1, lines 23-25).

23. As to claim 18, Dreamweaver discloses determining if the name of the designated attribute contains a designated prefix (pg.19,

"getElementsByTagName(tagName)");

Dreamweaver does not specifically disclose generating a function name comprising of the name of the designated attribute; assigning an object associated with the designated attribute as the parameter of the function name ; and assigning predetermined instructions of the designated attribute as steps for a function having the function name to perform.

In the same field of endeavor, Cain discloses generating a function name comprising of the name of the designated attribute (col.12, lines 12-13; "click");

assigning an object associated with the designated attribute as the parameter of the function name (fig.4H); and

assigning predetermined instructions of the designated attribute as steps for a function having the function name to perform(fig.4H-I).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Dreamweaver and the teachings of Cain for the benefit of creating a custom graphical operator interface.

24. As to claim 19, Dreamweaver does not disclose dynamically generating a function name associated with the designated attribute; passing an object associated with the designated attribute as a parameter of the generated function name; receiving the attributes of the object; and performing a function stored in memory having the generated function name.

In the same field of endeavor, Cain discloses dynamically generating a function name associated with the designated attribute (col.12, lines 12-13);

passing an object associated with the designated attribute as a parameter of the generated function name (fig.4H);

receiving the attributes of the object (col.12, lines 29-31); and

performing a function stored in memory having the generated function name (fig.4H-I).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Dreamweaver and the teachings of Cain for the benefit of creating a custom graphical operator interface.

25. As to claim 20, Dreamweaver discloses determining if the name of the designated attribute contains a designated prefix (pg.25, par.1). Dreamweaver does not specifically disclose generating a function name comprising of the name of the designated attribute; assigning an object associated with the designated attribute as the parameter of the function; and assigning predetermined instructions of the designated attribute as steps for the function to perform.

In the same field of endeavor, Cain discloses disclose generating a function name comprising of the name of the designated attribute (col.12, lines 12-13);

assigning an object associated with the designated attribute as the parameter of the function (fig.4H); and

assigning predetermined instructions of the designated attribute as steps for the function to perform (fig.4H-I).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Dreamweaver and the teachings of Cain for the benefit of creating a custom graphical operator interface.

**26. Claims 10 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dreamweaver, SVG and Cain.**

27. As to claim 10, Dreamweaver discloses searching for a designated control element in a document object model (pg.28, par. "traversing nodes" and "getting node data") and calling a function associated with the designated control element (pg.28, par. "traversing nodes" and "getting node data"). Dreamweaver does not generating a function name associated with the flow control element; calling the generated function name; and processing child elements of the flow control element.

In the same field of endeavor, Cain discloses generating a function name associated with the designated element (col.12, lines 12-13); calling the generated function name (fig.4H); and performing the function (fig.4H-I). Cain does not disclose the designated element is a flow control element, and the function is to processing child elements of the flow control element;

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Dreamweaver and the teachings of Cain for the benefit of creating a custom graphical operator interface (Cain, col.1, lines 23-25).

Art Unit: 2100

In the same field of endeavor, SVG discloses a flow control element (sec. 5.8.1, "conditional processing overview"; switch element); and

processing child elements of the flow control element (sect. 5.8.2, "the 'switch' element"; the switch element evaluates attributes on its direct child elements, and then process the child elements).

It would have been obvious to one of ordinary skill in the art, having the teaching of Dreamweaver and Cain and the teaching of SVG before him at the time the invention was made, to modify the custom graphical operator interface taught by Dreamweaver and Cain to include conditional elements taught by SVG with the motivation being to provide an ability to specify alternative views of the custom graphical operator interface (SVG, sect. 5.8.1 first par.).

In the same field of endeavor, Cain discloses generating a function name comprising of the name of the designated element (col.12, lines 12-13); and

calling the generated function name (fig.4H-I).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of SVG and the teachings of Cain for the benefit of creating an object-based, interactive, visual-programming system accessible via a graphical user interface (Cain, col.3, lines 23-25) in an integrated vector web design application.

28. As to claim 23, SVG discloses manipulating viewer behavior with respect to a web application (sec.17.6, view module; sec.16.7 Magnification and panning, zoomAndPan), the method comprising the steps of:

searching for a viewer behavior element in a document object model of the web application(5.17 DOM interfaces, Interface SVGSVGElement, 'getElementById'; 17.6 view module; using the getElementById function to search for a viewer behavior element 'view'); SVG does not specifically disclose generating a function name associated with the viewer behavior element; and calling the generated function name.

In the same field of endeavor, Cain discloses generating a function name comprising of the name of the designated element (col.12, lines 12-13); and calling the generated function name (fig.4H-I).

### ***Response to Arguments***

1. Applicant's arguments filed 02/07/2008 have been fully considered but they are not persuasive.
2. Applicant argues that Dreamweaver does not disclose a system for extending interactivity of a presentation markup language.

In response to applicant's argument, Dreamweaver is a web development tool that allows customized **extensions** to be created for the benefit of extending interactivity of

Art Unit: 2100

a presentation markup language (pg.7, pg.8, pg.13; <http://html.w3.org/html4/strict/>; <http://www.w3.org/wiki/HTML401/HTML401>; Dreamweaver definition;).

3. Applicant argues that Dreamweaver does not disclose having a name which follows a designated naming convention.

In response to applicant's argument, Dreamweaver discloses of naming elements with specified naming conventions such as prefix that distinguishes the functionalities of an elements followed by the actual name of the element (pg.25, line 1; prefix; pg.26, attribute name).

4. Applicant argues that Dreamweaver does not disclose calling a function associated with the designated control element.

In response to applicant's argument, Dreamweaver discloses that a user is able to use functions such as `getAttribute()` and `hasChildNodes()` to gain information pertaining the control elements that the user wishes to access (pg.28, par. "traversing nodes" and "getting node data").

5. Applicant argues that SVG does not disclose flow control elements for controlling statement flow of a web application.



In response to applicant's argument, SVG discloses flow control elements for controlling statement flow of graphics elements of a web application (sect. 5.8.2, "the 'switch' element"). Further, SVG is a standard that is designed to be integrated into a plurality of web application language standards such as HTML and XML (sect.1.4).

6. Applicant argues that one skilled in the art would not be led to apply the SVG specification to the Dreamweaver reference.

In response to applicant's argument, Dreamweaver provides a platform for extending interactivity of a presentation markup language in accordance with language standards (Dreamweaver, pg.14). SVG is a standard that is designed to be integrated into a plurality of web application language standards (SVG, sect 1.4). Therefore, it would have been obvious to one of ordinary skill in the art to combine the web application platform that uses well known web language standards disclosed by Dreamweaver in combination with vector graphic standard disclosed by SVG for the benefit of creating multimedia web applications.

7. Applicant argues that SVG does not disclose searching for a flow control element.

In response to applicant's argument, SVG discloses searching for an element (5.17 DOM interfaces, "getElementById").

8. Applicant argues that Dreamweaver, SVG and Cain do not disclose generating a function name associated with the flow control element.

In response to applicant's argument, SVG discloses a flow control element (sec. 5.8.1, "conditional processing overview"; switch element); and Cain discloses generating a function name comprising of the name of the designated element (col.12, lines 12-13).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of SVG and the teachings of Cain for the benefit of creating an object-based, interactive, visual-programming system accessible via a graphical user interface (Cain, col.3, lines 23-25) in an integrated vector web design application.

9. Applicant is reminded that any citation to specific, pages, columns, lines, or figures in the prior art references and any interpretation of the references should not be considered to be limiting in any way. A reference is relevant for all it contains and may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art. In re Heck, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting In re Lemelson, 397 F.2d 1006,1009, 158 USPQ 275, 277 (CCPA 1968)).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HAOSHIAN SHIH whose telephone number is (571)270-1257. The examiner can normally be reached on m-f 0730-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dennis Chow can be reached on (571) 272-7767. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HSS  
/DENNIS-DOON CHOW/  
Supervisory Patent Examiner, Art Unit 2173